ON THE PHASEHOOD AND NON-PHASEHOOD OF CP

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In this paper, we argue that the combination of an Agree feature and a Tense feature on CP determines the (non-)phasehood of CP. We propose that the presence of both features makes CP a phase while the absence of one or both of the two features makes it a non-phase. It follows from this proposal that finite complements are CP phases while control complements, raising complements, and Accusative with Infinitives are non-phase CPs. It is then predicted that operations can apply across the CP of the latter types. We will show that this prediction is borne out.*

Keywords: phases, control constructions, raising constructions, accusative with infinitive constructions

1. Introduction

It has been commonly held that finite complement clauses constitute an opaque domain; A-movement is not possible from finite complements or a binding relation does not hold across a finite clause boundary. However, in some other clauses, these syntactic operations are applicable across a clause boundary. This contrast is shown in (1).

(1) a. *John seems that it is believed by everyone.
   b. This story seems to be believed by everyone.

   (Haegeman (1994: 316))

Chomsky (2000 and his subsequent works) claims that operations across

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CP are prohibited because CP is a phase, which is subject to the PIC (Phase Impenetrability Condition). A question arises why some complement clauses do not block operations.

The aim of this paper is to propose that the combination of features on CP determines the (non-)phasehood of CP and to argue that finite complement clauses are introduced by CP phases, while control complements, raising complements, and Accusative with Infinitives (henceforth, Acls) are introduced by CPs that are not phases: operations can apply across CP in such constructions as control, raising, and AcI constructions.

The organization of this paper is as follows. In section 2, we offer a brief overview of the recent Minimalist Program outlined by Chomsky (2000 and his subsequent works). In section 3, we present our proposal on the phasehood of CPs and predictions that operations are possible across the CP of control complements, raising complements, and AcI clauses. In section 4, we discuss control constructions to show that the predictions are correct. In section 5, we deal with raising constructions and show that operations are applicable across CP. Section 6 shows that our prediction is also borne out in AcI constructions in Turkish. We conclude our discussion in section 7.


In this paper, we adopt Chomsky (2005) as our framework and presuppose some assumptions in his previous papers (Chomsky (2000, 2001, 2004)). Here, we mention four assumptions that are related to our discussion.

First, we presuppose the Agree operation, which holds between two elements, T/V and DP. Given the stage where T possesses unvalued φ-features, the features activate T, and it searches the DP that has matching features. When there is an appropriate DP, T enters into an Agree relation with the DP. As a consequence, T receives the value of φ-features from the DP and assigns the case value to the DP. We also assume that multiple elements can enter into an Agree relation simultaneously, as Hiraiwa (2000) claims.

Second, we assume the operation Merge in the Minimalist Program. Merge, either Internal Merge or External Merge, serves for structure building in the derivation. Under Internal Merge, displacement properties of an element are observed. We refer to Internal Merge as Move for convenience. By the operation Move, an element undergoes A-motion
or A'-movement. What we are mainly concerned with in this paper is A-movement, which we assume is motivated by an Agree feature. An Agree feature attracts the closest DP to a specifier position. For example, an Agree feature on T attracts the closest active DP. Usually, the attracted DP is an external argument placed in [Spec, vP]. This DP moves to [Spec, TP], attracted by the Agree feature on T. This position is a canonical subject position. The same relation holds between V and an object DP as well. The position [Spec, VP] is a canonical object position. This A-movement is diagrammed in (2).

\[
\text{(2) a. } \begin{array}{c}
\text{[CP} & [\text{TP Subject}_i] & [T'_T & [\text{vP} & t_i] & [\text{vP} & V]]]
\end{array}
\]

\[
\text{b. } \begin{array}{c}
[\text{vP} & [\text{VP Object}_i] & [V'_V & t_i]]
\end{array}
\]

Third, let us turn to the operation Spell-Out. It is sometimes called Transfer, but we refer to this operation as Spell-Out for convenience. The domain of a phase is Spelled-Out as soon as the phase is constructed. The domain here means the complement of a phase. The Spell-Out is shown in (3).

\[
\text{(3) } \begin{array}{c}
[\text{XP} & X & \text{YP}]
\end{array}
\]

Suppose that in (3) X is a head of a phase. When XP is constructed, the complement of X (that is, YP) is Spelled-Out. Spell-Out is regulated by the PIC. Chomsky says (4):

\[
\text{... PIC holds only for the mappings to the interface, with the effects for narrow syntax automatic.} \quad \text{(Chomsky (2005: 10))}
\]

Here departing from Chomsky's claim of the PIC, which does not constrain the syntactic operations and which allows Agree to permeate into a lower phase, we assume in this paper that the domain of a phase becomes inaccessible to both Agree and Move operations when the domain is Spelled-Out. We assume it because of the following reasons. First, the arguments for probing into an earlier phase are not completely conclusive and this is a problem under debate. Second, the arguments for Agree across finite CP are often based on the data from Chukchee and other ergative languages that we will not discuss in this paper. Finally, the languages we will discuss in this paper are claimed to show that the finite CP blocks both Agree and Move. For these reasons, we assume that finite CPs, once Spelled-Out, constitute the opaque domain for both Agree and Move.

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1 On the other hand, we assume that the motivation of A'-movement is an Edge feature, which was called an EPP feature in Chomsky (2001, 2004, 2005). I thank an anonymous reviewer for clarifying this point.
Under this assumption, Spell-Out, which is regulated by the PIC, makes the domain of a phase inaccessible. Thus, a simple consequence of this difference between a phase and a non-phase is that operations such as A-movement and Agree cannot apply across a phase, but can apply across a non-phase.2

Fourth, one assumption in Chomsky (2005) that has not been made in his previous papers (for example, Chomsky (2000, 2001)) is the mechanism of feature inheritance by a phase head. Specifically, in finite clauses, the phase head C possesses an Agree feature and a Tense feature at the stage where it is introduced into the narrow syntax. Subsequently, the inheritance of these sets of features takes place from C to T. As a result of feature inheritance, C-T or \( v-V \) configuration serves as a probe agreeing with DP and assigning the case value.3

In this section, we have introduced the main assumptions under the Minimalist Program pursed in Chomsky (2000 and his subsequent work). However, unlike Chomsky, we assume that Spell-Out makes the domain of a phase inaccessible to both Agree and Move.4

3. The Proposal and Predictions

3.1. The Proposal

Examining finite clauses, Chomsky (2005) claims that CPs have an Agree feature and a Tense feature. With this background in mind, we propose (5) as a condition that determines the phasehood of CPs.

(5) The phasehood of CPs is determined by the combination of an Agree feature and a Tense feature; if a CP possesses both Agree

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2 An anonymous reviewer asks what defines a phase. We tentatively assume that CP and \( vP \) have the possibility of being phases. What makes them the actual phases is the combination of their features, to be discussed below, while we commit ourselves only to CP. Therefore, our proposal makes a different claim from Chomsky’s. He claims that a phase is an element with an Agree feature. We will argue that two features (namely, an Agree and a Tense feature) are involved in determining the status of a phasehood.

3 For convenience, throughout this paper we simply use T or V for a probe and a case-assigner, in stead of C-T configuration or \( v-V \) configuration, respectively.

4 Chomsky (2005) claims that extraction out of subjects is only possible in passive or unaccusative constructions. However, Fuminori Matsubara (personal communication) pointed out to me that such extraction is possible in a wider range of constructions, such as simple transitives. Based on this, Matsubara claims that the framework outlined by Chomsky (2005) faces some empirical problems. We leave this problem open for further research.
and Tense features, it is a phase; if a CP does not have one or both of the two features, it is not a phase.

Given an Agree feature and a Tense feature on CP, the logical possibilities for the combination of these features are shown in Table 1. Therefore, there should be three additional types of CPs.

<table>
<thead>
<tr>
<th>Type</th>
<th>Agree feature</th>
<th>Tense feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finite complements</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Control complements</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Raising complements</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Accusative with Infinitives</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

We assume, following Chomsky (2005), that the CP of finite clauses has both Agree and Tense features. It follows that it is a phase. The other three types of clauses lack one or both of the Agree and Tense features. Thus, the CPs of these types should be non-phases. In what follows, we will show that this is indeed the case, by examining control complements, raising complements, and AcIs.

3.2. Predictions

Our proposal predicts that operations do not apply across finite CPs because of the PIC, as (6a) shows, since the CPs constitute phases. On the other hand, it is predicted that the CPs of control and raising complements and AcIs are non-phases, so operations across the CPs should be possible, as in (6b), since a non-phase is not subject to the PIC.

5 An anonymous reviewer points out that the distinction between phases and non-phases is reminiscent of the one between non-defective and defective Ts in Chomsky (2001). This can be so, because both the current proposal and Chomsky’s proposal of defectiveness claim that some kind of feature combination determines the opacity and transparency of clauses. We claim that the intuition that underlies defectiveness is on the right track. However, there is a difference between the two approaches. In Chomsky’s defectiveness, T is responsible for the opacity/transparency of clauses. On the other hand, our claim is that C is crucial to determine it.
In what follows, by examining various syntactic phenomena we will show that our proposal makes the correct predictions. We will discuss control constructions in section 4, raising constructions in section 5, and AcIs in section 6.6

4. Control Constructions

Table 1 in the previous section shows that both of the Agree and Tense features are absent in control complements. In section 4.1, we confirm that the CP has neither an Agree feature nor a Tense feature. In section 4.2, we show that operations are applicable across the CP of control complements since a non-phase is not subject to the PIC. Section 4.3 discusses some related issues concerning control constructions; the interpretation, the distribution, and the case of PRO.

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6 Under the mechanism of feature inheritance, T has no inherent features since Agree- and Tense-features are derivative from C. Here, an anonymous reviewer raises a question of whether there should be no need for TP in the case of C without Agree features. Our answer is that in this case, TP is necessary because TP inherits a Tense feature from C. The further question is, then, the case of C without both Agree and Tense features. We will argue in section 4 that the CP of control complements does not have both of these features. However, even in this case, T exists because we assume that T is realized as to in English.

7 In this paper, we focus on a subclass of control constructions. This subclass is exhaustive control and wh-infinitival constructions under Landau’s (2000) classification. Exhaustive control constructions include implicative verbs such as manage and force, aspercial verbs such as begin, and start, and modals such as need, and is able. As an anonymous reviewer correctly points out, there are other types of non-finite constructions, shown below.

(i) a. John wants for Mary to leave.
   b. It is difficult for John to leave.

The discussion of for-DP-infinitives shown in (i) and (ii) is put aside in this paper, because they are not classified into exhaustive control constructions (see Landau (2000)). To discuss various types of control constructions is beyond the scope of the paper.
4.1. Properties of Complement Clauses in Control Constructions

4.1.1. Absence of a Tense Feature

In this paper, we adopt temporal morphology as diagnostic to see whether there is a Tense feature on CP. If a full range of temporal morphology can appear, a clause has a Tense feature. This diagnostic test shows that control complements do not have a Tense feature. For example, in English, control complements cannot bear any temporal morphology such as -ed or -en. The constraint on temporal morphology also holds for Bulgarian, where every kind of complement clause must bear temporal morphology. However, verbs in control complements cannot inflect for a full range of tenses. As the sentence in (7) shows, the control complement can occur only in the form of the present tense, irrespective of the matrix tense.

(7) *Ivan možeše da pročeteš/beše pročel pismoto.
Ivan could-3sg da read-Imperf.3sg/was-3sg read-Prt letter-the
‘Ivan was able to read the letter.’ (Krapova (2001: 118))

We then conclude that there is no Tense feature on the CP of control complements.

Asako Uchibori (personal communication) and an anonymous reviewer point out that there are a number of arguments that some control complements have Tense (Landau (2000), Martin (1996, 2001), and Stowell (1981) among others). Remember, as we have mentioned in note 7, that we discuss a small set of control constructions; exhaustive control constructions and wh-infinitivals. For the former, Landau (2000) claims that their complement clauses do not contain independent tense. For wh-infinitivals, they are claimed to have tense property. However, what is important to our claim is that control complements of this type do not show full temporal properties that finite clauses exhibit. What they show is not a tense property but a modal property (e.g. irrealis). Thus, as a further specification, some control complements can be described as [−Tense] but [+irrealis]. We do not exclude this kind of possibility (see Landau (2000), Martin (1996), and Wurmbrand (2007) for the discussion of the temporal property of control constructions). 8

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8 Martin’s (1996) observation that control complements can undergo VP-ellipsis while ECM-complements do not perhaps needs explanations from a different perspective under the current analysis. He claims that this difference is attributed to the temporal property of these clauses. We do not discuss this issue because of the limitation of space.
4.1.2. Absence of an Agree Feature

We argue that control complements lack an Agree feature as well as a Tense feature. The sentences in (8) show that quantifiers associated with PRO cannot occur in front of the infinitive to. Given that a quantifier occurs in the same position as the element that it modifies, it follows that PRO does not occur in [Spec, TP]. This fact indicates that there is no Agree feature that attracts PRO (and a quantifier) to [Spec, TP].

(8) a. *They tried all to leave. (Baltin (1995: 200))
   b. They tried to all like John. (Baltin (2001: 235))

This distribution of a quantifier indicates that the CP of control complements does not have an Agree feature.9, 10

4.2. Operations across CP

In section 4.1, we have demonstrated that there is neither a Tense feature nor an Agree feature on the CP of control complements. Because of the

9 The following researchers claim that PRO does not move to [Spec, TP] on different grounds: Henry (1995), Mensching (2000), and Nakamura (1991). An anonymous reviewer offers (ia) and (iia) (with their structures in (b)-examples) as counterexamples to the claim that PRO does not move.

(i) a. The boys managed to all appear to their mothers to have eaten their spinach.
   b. The boys managed to all appear to their mothers [PRO to have t eaten their spinach]

(ii) a. The boys tried to all get arrested at the demonstration.
    b. The boys tried [to all get arrested PRO at the demonstration]

What is important to our claim is that in control complements, PRO does not occur to the left of the infinitive to, and PRO is not attracted by an Agree feature of this type of infinitive. In some other position below TP, PRO can occur. In this case, it is attracted by an Agree feature of the verbal projection. Therefore, the fact that even in (i) and (ii) all cannot appear before to indicates the lack of an Agree feature of control to. It is a problem what kind of element in the verbal projection attracts PRO in (i) and (ii), but we do not discuss the problem for limitation of space, and leave it for further research.10 Let us note a fact about the so-called wanna-contraction. If PRO and wh-trace occupied the same position, the difference in grammaticality between (i) and (ii) should need some explanation.

(i) I wanna visit Sally.
(ii) *Who do you wanna t visit Sally? (Baltin (1995: 244))

However, as Baltin (1995) claims, under the assumption that PRO does not move to [Spec, TP], this difference is no longer mysterious. In (ii), the wh-trace occurs between the verb want and to, blocking wanna-contraction. On the other hand, in (i), PRO in fact occupies a vP-internal position. There is no element in [Spec, TP], hence wanna-contraction becomes possible. I thank an anonymous reviewer for bringing wanna-contraction to my attention.
absence of these two features, it follows from our proposal that the CP of control complements is a non-phase. Thus, we predict that some operations can apply across CP.

4.2.1 Wh-movement from a Wh-island

Generally, wh-movement across another wh-phrase degrades grammatical-ity (observed originally in Ross (1967)). However, this is not the case for control constructions, as shown by the contrast between (9) and (10).

(9) a. *Sam, who I know when you said you saw t,...
   b. *The Matterhorn, which I found out why he announced that he climbed t,...

(10) a. Sam, who I know when to try to see t,...
   b. The Matterhorn, which I've decided when to attempt to climb t,...
   (Frampton (1990: 69–70))

This difference between finite and control complements can be accounted for by the (non-)phasehood of CPs. Let us take (9a) and (10a) as examples. (9a) and (10a) have the structures in (11) and (12) respectively.

(11) Sam, [CP₁ who [TP₂ I [vP₃ know
    [CP₄ when [TP₅ you [vP₆ said [CP₇ [TP₈ you [vP₉ saw t,...

(12) Sam, [CP₁ who [TP₂ I [vP₃ know
    [CP₄ when [TP₅ to [vP₆ PRO try [CP₇ [TP to [vP₈ PRO see t,...

In both (11) and (12), the relative operator who successive-cyclically moves up to the edge of vP₆, but it cannot move up to CP₄, because another wh-word when has already occupied it. A difference emerges in whether the complement of CP₄ is Spelled-Out or not. In (11), TP₅ must be Spelled-Out along with the relative operator adjoined to vP₆, since TP₅ is the complement of the head of the phase CP₄. Therefore, successive cyclic A'-movement cannot skip a possible intermediate landing site. On the other hand, in (12), TP₅ is not Spelled-Out. The domain of CP₄ is still accessible. Therefore, when the v₃ enters into the derivation, the relative operator adjoined to vP₆ can move to vP₃, and finally to CP₁ without violating the PIC. This contrast in movement from wh-island between finite and control complements confirms our prediction.¹¹,¹²

¹¹ The same contrast can be seen in many languages. For example, see Rizzi (1982) for Italian and Bordelois (1986) for Spanish.
¹² In the discussion of the text, the judgments of (9) and (10) are somewhat idealized. However, as an anonymous reviewer correctly points out, the actual grammatical status of (10) is not perfect. The reviewer judges them as marginal, marked
4.2.2. Scrambling

Let us turn to scrambling, which is assumed to be derived by the movement operation. Let us take scrambling in German to confirm our prediction that an element cannot be scrambled across a finite CP while such scrambling is allowed from control complements.

In German, an element generally cannot move across CP by the scrambling operation. This is shown in (13).

\[(13) \text{ a. Gestern hat } [\text{TP der Lehrer } [\text{VP den Schüler darauf}}\]
\[\text{hingewiesen } [\text{C'} daß } [\text{TP Berber eine schwere}}\]
\[\text{Sprache ist}]].\]
\[\text{b. *Gestern hat der Lehrer } [\text{VP } [\text{NP eine schwere}}\]
\[\text{Sprache}] [\text{VP den Schüler darauf hingewiesen}}\]
\[\text{that Berber-Nom is}}\]
\[\text{c. *Gestern hat } [\text{TP eine schwere Sprache}] [\text{TP der Lehrer den}}\]
\[\text{Schüler darauf hingewiesen } [\text{C'} daß Berber } t_i \text{ ist}]].\]

(Grewendorf and Sabel (1994: 264))

(13a) is the base structure. From this structure, (13b) and (13c) are derived by the scrambling of the phrase "eine schwere Sprache" 'a difficult language' across CP to vP and to TP, respectively. Both (13b) and (13c) are ungrammatical. Based on sentences like (13), it is assumed that in German, scrambling cannot apply across a finite CP.

as ?? sentences. The reviewer also suggests that the marginality of (10) is due to an intervention effect and the more degraded case of (9) is attributed to an intervention and a violation of the PIC. We believe that this is a highly probable analysis, because in the current Minimalist Program, the degree of grammaticality is captured by the number of constraints that are violated. Under this view, the more degraded grammaticality of (9) than of (10) should be due to the greater number of violations involved.

13 We assume that an element undergoing scrambling moves successive-cyclically to vP and TP. What should be clarified at this point is that unlike A'-movement such as wh-movement, movement by scrambling cannot make use of [Spec, CP] as an escape hatch. I thank an anonymous reviewer for bringing this point to my attention.
However, the situation is different in the case of scrambling out of control complements; a phrase can scramble across the CP of control complements.

(14) \[ [C_\text{}` \text{da\ss} \] [TP [den Hund]]_\text{i} [TP keiner [CP PRO t_i zu f\ddot{u}ttern] that the dog-Acc nobody-Nom to feed versuchte ]]]

tried

‘that nobody tried to feed the dog.’

In (14), the DP \textit{den Hund} ‘the dog’ moves across the CP of the control complement clause and adjoins to TP in the matrix clause.

Our analysis can correctly make the prediction about the grammaticality of (14) since the CP of control complements is a non-phase, due to the absence of an Agree feature and a Tense feature. The matrix \(v\) can have access to TP in the complement clause across CP. Therefore, it is possible for a scrambled element to move from the embedded TP to the matrix \(v\text{P}\) across CP.14

4.2.3. Agreement across CP

We predict that the Agree operation shows a contrast between finite and control complements. Specifically, in finite clauses, no two elements can enter into an Agree relation across \(C\), while in control constructions the Agree relation can hold. This prediction is borne out by the following contrast in Modern Greek.

(15) a. \(\text{I Maria parakalese to Yianni, PRO}_i \text{ na diavasi.}\)

Mary asked John-Acc PRT read-3sg

‘Mary asked John to read’

(Terzi (1997: 339))

b. \(\text{O Yiannis legi oti doulevo mazi sou.}\)

John say-3sg that work-1sg with you.

‘John says that I work with you.’

(ibid.: 348)

Sentence (15a) is an example of object control constructions and (15b) is a sentence whose matrix verb is a bridge verb. The most important point in (15a) is that the embedded verb \textit{diavasi} ‘read’ is inflected in accordance with the controller \textit{to Yianni} ‘John’: agreement takes place between the two across CP.15 Putting aside details, we argue that this agreement between \textit{to}

14 Serbo-Croatian and Polish pattern with German in the relevant respects. See Progovac (1991) for Serbo-Croatian and Dyle (1983) for Polish. Also, VP-scrambling in Japanese shows the same kind of contrast between finite and control complements (see Nemoto (1999)).

15 We will return to the derivation of control constructions in section 4.3 below.
Yianni ‘John’ and diavasi ‘read’ is possible because the control complement CP is not a phase. Even when CP is constructed, the TP of its complement is not Spelled-Out since it is the complement of the non-phase. Then, the probe \( v \) can access the active goal diavasi ‘read.’\(^{16}\) On the other hand, such agreement cannot take place if the embedded clause is finite in (15b). The TP in the complement clause that follows the CP phase should be Spelled-Out. Therefore, at the stage where the matrix \( v \) enters the derivation, TP already constitutes the inaccessible domain. Hence, the matrix \( v \) cannot agree with doulevo ‘work.’

4.2.4. The Licensing of NPIs

In this section, we discuss the licensing condition of NPIs (Negative Polarity Items) in Serbo-Croatian. In this language, a set of NPIs are called ni-NPIs because they have the prefix ni. Ni-NPIs are licensed by a negative element within the same clause. Here, observe the contrast in the licensing of ni-NPIs in finite and control complements, as in (16) and (17).

(16) *Milan ne tvrdi [ da Marija poznaje ni(t)ko-ga].
    Milan not claims that Mary knows no-one-Acc
    ‘Milan does not claim that Mary knows anyone.’
    (Progovac (1994: 41))

(17) Mira ne želi da vidi nikoga.
    Mira not wishes that sees no-one
    ‘Mira does not want to see anyone.’
    (Progovac (1991: 568))

In (16), the sentence is ungrammatical because the negative marker and the ni-NPI do not occur within the same clause. In contrast, in (17) the matrix negative marker can license the embedded NPI in the control construction.

This contrast between (16) and (17) can be accounted for by our proposal. The CP of finite clauses in (16) is a phase, and its complement TP should be Spelled-Out. Thus, the NPI within the complement clause is not accessible to the matrix negative marker, and it cannot be licensed. On the other hand, the CP of a control complement in (17) is a non-phase, and then Spell-Out is not applied to its complement TP. Thus, in (17), the NPI within the complement can be licensed by the matrix negative marker.

\(^{16}\) Speaking precisely, it is T in the embedded clause that enters into an Agree relation with the probe \( v \) in the matrix. Then, agreement morphology lowers onto \( v \) at PF.
4.2.5. Restructuring

Let us now turn to clitic climbing, long object preposing, and auxiliary selection, grouped under the name of restructuring (see Rizzi (1978)). Finite and control complements contrast with respect to these phenomena: only control complements permit the application of these syntactic operations across CP. These operations are applicable across CP, not because the restructuring operation applies, but because operations are applied across the non-phase CPs of the control complements. Under the current analysis, there is no need to stipulate the restructuring operation.

4.2.5.1. Clitic Climbing

Clitic climbing is the movement of a clitic to an upper clause, found in Romance languages. This movement is illustrated in Italian examples in (18).

(18) a. Mario lo vuole leggere.
    Mario it want read
b. Mario vuole leggerlo.
    Mario want read-it

`Mario wants to read it.' (Burzio (1986: 322))

In (18b), the clitic attaches to the closest verb, while in (18a), it moves to the pre-verb position of the matrix clause beyond the embedded verb. This movement of clitics is called clitic climbing.

Note that clitic climbing usually takes place only from control complements, but not from finite complements. This contrast is attributed to the (non-)phasehood of CPs. In finite complements, the CP is a phase. It blocks clitic climbing, since the complement clause becomes inaccessible to the matrix verb. On the other hand, in control complements, the CP is a non-phase, the domain of which is accessible to the matrix verb. It permits a clitic to raise.17

Moreover, clitic climbing can occur across wh-phrases only when the wh-phrases occur in control complement clauses, as is shown in the Italian examples below.

(19) Non ti saprei che dire.
    Neg to-you I-would-know what to say

`I would not know what to say to you.'

17 See Aissen and Perlmutter (1983) for clitic climbing in Spanish.
In (19), the clitic *ti* `to you' climbs up to the matrix verbs, moving across the *wh*-phrase *che* `what,' which is in [Spec, CP] in the embedded clause. The same holds for (20): the clitic *lo* `him' moves from the object position of the embedded verb *affidare* `to entrust.' We would like to emphasize that this is possible only when the embedded clauses are selected by control verbs. Since the CP of control complements is a non-phase, the TP in the embedded clause is not Spelled-Out. Therefore, the clitic can move to the upper clause across CP.

**4.2.5.2. Long Distance Object Preposing**

There is a contrast in long object preposing between finite and control complements. Examples of long object preposing are illustrated in (21) from Italian.

(21) a. *Si voleva proprio leggere questi libri.*
   *SI wanted really to read these books*

b. *Questi libri si volevano proprio leggere.*
   *These books SI wanted really to read*
   `We really wanted to read these books'

(21 a) is the base structure for (21b). In (21b), the object, which originates in the embedded VP in (21a), occurs in the sentence initial position. These examples have been accounted for as A-movement of the embedded object from the embedded clause (Rizzi (1978) and Burzio (1986), among others): in these constructions, A-movement is applied across CP. In contrast, long object preposing cannot occur from finite clauses.18

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18 An anonymous reviewer asks why the objects undergo A-movement across vP in (21), since the embedded vP is transitive, hence a phase. We assume that in sentences such as (21), the (non-)phasehood of vP is associated with that of CP. Specifically, when C is a non-phase, this property of C is somehow transmitted to v which becomes a non-phase too.

We further assume that whether this relation between CP and vP holds is a parametric variation among languages. In “restructuring” languages, like Italian and Spanish, this relation holds. On the other hand, in non-restructuring language like English, CP’s phasal status is not transmitted to vP. As a result, the English counterpart of (21) is ungrammatical. The example sentence is shown in (i).
This difference between finite and control complements is attributed to the (non-)phasehood of CP. In control constructions, the complement of the non-phasal CP is not subject to Spell-Out and accessible to further operations such as long object preposing, while the finite CP is a phase which blocks such movement.  

4.2.5.3. Auxiliary Selection

In finite clauses, the matrix auxiliary is selected only by the matrix verb, while in control constructions it can be selected by either the matrix verb or the embedded verb. This contrast also can be accounted for in terms of the difference in the phasal status of CPs between finite and control complement clauses.

Let us first observe the data from Italian shown in (22).

\[(22)\]
\[a.\] Giovanni è arrivato.
Giovanni BE arrived
‘Giovanni has arrived.’
\[b.\] Giovanni ha telefonato.
Giovanni HAVE telephoned.
‘Giovanni has telephoned.’ (Burzio (1986: 53))

In Italian, the distribution of auxiliaries in finite clauses is determined, depending on the property of the closest verb. Burzio (1986) claims that unaccusative verbs choose the counterpart of be, as (22a) shows, while unergative verbs take the counterpart of have as (22b) indicates.

Turning to control constructions, the matrix auxiliaries in control constructions can be selected by either the closest (i.e. matrix) verb or the embedded verb in the following examples where auxiliaries and selecting verbs are boldfaced.

\[(23)\]
\[a.\] Mario avrebbe proprio voluto andare a casa.
Mario HAVE really wanted to go home
\[b.\] Mario sarebbe proprio voluto andare a casa.
Mario BE really wanted to go home
‘Mario would have really wanted to go home.’
(Burzio (1986: 322–323))

\[(i)\] *Mary was wanted to kick ti.
In English, transitive vP is a phase, irrelevant to the phasal status of CP. I thank an anonymous reviewer for bringing English sentences to my attention.

19 See Aissen and Perlmutter (1983) for Spanish examples.
Let us assume here that the auxiliary selection is an instance of Agree between a verb and an auxiliary. Given this assumption, the following two Agree relations are involved in the sentences in (23):

(24) Mario avrebbe/sarebbe proprio voluto andare

\[
\begin{array}{c}
\text{TP Mario} \\
\text{HAVE/BE} \\
\text{really} \\
\text{vp wanted} \\
\text{CP TP to go}
\end{array}
\]

a casa.

Note here that the agreement between sarebbe `be' and andare `to go' is an instance of Agree across CP. This operation is possible because the CP of control complements is a non-phase, the Spell-Out operation does not apply to the TP in the embedded clause, and the Agree operation applies across CP. On the other hand, in the case where the embedded clause is finite, this agreement across CP is not possible. This is because the TP in the CP phase undergoes Spell-Out and becomes inaccessible to the operation driven by a matrix element.

4.3. Related Issues on Control Constructions

In what follows, we will discuss some related issues on control constructions. Before we discuss them, let us see how to derive control constructions under our present analysis.

Let us assume that PRO is introduced into the syntax with an unvalued case feature like other DPs and with unvalued \( \varphi \)-features unlike other DPs. This assumption is plausible because PRO does not have inherent reference, and its meaning depends on another DP (i.e. the controller). Suppose the term “\( \varphi \)-features” is a cover term, meaning not only person/number/gender specification, but also other semantic contents such as reference in the discourse and further assume that PRO receives all of the semantic contents of the controller. If PRO had inherent \( \varphi \)-features (inherent person/number/gender and inherent reference in the discourse) on its own, the interpretation of PRO would conflict with that of the c-commanding controller. Therefore, it is plausible to assume that PRO enters into the syntax with unvalued \( \varphi \)-features (along with an unvalued case feature).  

20 On the claim that PRO inherits or receives value of the \( \varphi \)-features from the c-commanding controller, an anonymous reviewer asks whether English anaphors such as
Our analysis claims that the complement CP in control constructions is a non-phase. This means that PRO can enter into an Agree relation with the probe in the upper clause. This is shown in (25).21

\[(25) \quad \begin{array}{c}
\text{a. } [\text{CP} [\text{TP} T \text{DP}_{\text{subj}} [\text{CP} \text{PRO}_{[\text{u-Φ}],[\text{u-Case}]]] \\
\text{b. } [\text{VP} [\text{VP} V \text{DP}_{\text{obj}} [\text{CP} \text{PRO}_{[\text{u-Φ}],[\text{u-Case}]]]]
\end{array}\]

In subject control constructions such as in (25a), the matrix T serves as a probe agreeing with two goals, the matrix subject DP and PRO, as an instance of Multiple Agree. The subject DP assigns the value of Φ-features to T and to PRO. T assigns the case value to the matrix subject DP and PRO. In object control constructions such as in (25b), the probe V agrees with two goals; the matrix object DP and PRO. The Φ-features of the matrix object determine the value of those of the matrix V and PRO. At the same time, the case assignment by V takes place to the object DP and to PRO.

The present analysis then implies the following:

\[(26) \quad \begin{array}{c}
\text{a. } \text{PRO shares the } \Phi \text{-features with the closest DP in the upper clause.} \\
\text{b. } \text{PRO shares the case value with the closest DP in the upper clause.}
\end{array}\]

With this in mind, let us discuss some related issues on control constructions.

We argue in section 4.3.1 that since the controller of PRO is decided as a consequence of the Agree relation holding between PRO and DP, the present analysis of control constructions does not necessitate an independent princi-

\[\text{herself, herself, and themselves necessarily have unvalued } \Phi \text{-features, as PRO does, and whether the same issue arises in long distance bound pronouns such as every group of students thinks that they/they/he will be awarded the prize. We assume that anaphors do not have fully specified } \Phi \text{-features and receive the necessary value in the narrow syntax. In other words, both PRO and anaphors lack some specification of } \Phi \text{-features, and the value is determined through the operation Agree.}\]

We have to add that this is a very rough idea, and many problems remain to be solved. For example, although there are many attempts to reduce the properties of PRO and anaphors to the same principle, the licensing conditions of PRO and anaphors differ (see Lasnik (1992) among others). As for long distance bound pronouns, there are many unsolved problems, which are beyond the scope of this paper.

21 The notations of [u-Φ] and [u-C] mean unvalued Φ-features and an unvalued case feature, respectively.
ple to determine the controller of PRO such as the MDP (Minimal Distance Principle) (Rosenbaum (1967)) and the like. Section 4.3.2 discusses the case-marking of PRO, based on the data from Russian, and argues that PRO receives the same case as its controller. In section 4.3.3, we claim that the distribution of PRO is determined as a result of an Agree relation. Thus, it will be shown that the controller, the case, and the distribution of PRO can be reduced to the Agree relation of PRO in the derivation.

4.3.1. The Minimal Distance Principle

As (26a) indicates, our present analysis claims that the closest DP is the controller of PRO since these two elements share the same value of \( \varphi \)-features. This analysis can capture the intuition of the MDP proposed in Rosenbaum (1967). Since the Agree operation is subject to the requirement that the distance of the operation be minimal, the controller and PRO, both of which enter into an Agree relation as two goals, are sufficiently close to each other. If there is an additional DP between the controller and PRO, the derivation crashes. Specifically, if the DP is inactive, the intervention effect occurs, and the unvalued features of PRO are left undetermined. If it is active, a probe (T or V) receives two different values of \( \varphi \)-features; one from the controller and the other from the additional DP. Thus, the controller should be the closest DP to PRO. The controller of PRO is determined without recourse to the MDP.\(^{22}\)

\(^{22}\) An anonymous reviewer asks how the present analysis accounts for the promise-type control construction, such as in (i).

(i) John promised Mary to return home by 5:00 p.m. (Larson (1991: 103))

There are at least two possible ways that are compatible with our analysis. One is to consider sentences like (i) to be a rather marked case of control, following Hornstein (1999) and Boeckx and Hornstein (2003). Boeckx and Hornstein say: "...well over half the native speakers of English do not allow a subject control reading for promise" (p. 273, fn. 10). Thus, we can consider promise-type as outside of central issues of control constructions. The other way is to adopt the proposal by Larson (1991), who claims that the underlying structure of the promise-type construction is similar to the double object construction. The underlying structure is shown in (ii) under the framework we adopt.

(ii) \([vP\ v [vP\ [v, promise\ Mary\ ]]\ [CP\ to\ PRO\ return\ home\ by\ 5:00\ p.m.]]\)

In (ii), CP is adjoined to V\(^{c}\), and PRO within this CP is c-commanded only by the subject DP. The subject control reading derives in consistency with the MDP.

What is important is that either way is compatible with our analysis. Therefore, the choice between the two is left open here.
4.3.2. Case of PRO

The present analysis claims in (26) that PRO shares the case value with its controller. The question we have to ask is whether we can find evidence that PRO and its controller have the same value of case. The answer is positive. Let us see examples from Russian. In this language, adjuncts such as odin ‘alone’ agree with a local subject. The inflection of these elements shows the case value of PRO. The case of odin ‘alone’ clearly indicates that in (27a) and (27b), PRO bears nominative case and accusative case, respectively.

(27) a. Son’a xošet [PRO idti v teatr odna].
   Sonia-Nom wants to-go in theater alone-Nom ‘Sonia wants to go to the theater alone.’

b. mama zastavila Pet’u [PRO pojti v teatr odnogo].
   mother forced Peter-Acc to-go in theater alone-Acc ‘Mother forced Peter to go to the theater alone.’

(Engelhardt (1999: 204))

The data from Russian constitute evidence that PRO and its controller have the same case value, as (26b) states (See Cecchetto and Oniga (2004) for similar examples from Latin). Thus, the discussion here confirms our analysis that PRO enters into an Agree relation with elements in the upper clause.23, 24

4.3.3. The PRO Theorem

The question we address in this section is whether the present analysis can account for the distribution of PRO better than the PRO theorem did in the GB (Government and Binding) theory. In the GB era, the distribution of PRO was accounted for by the PRO theorem, stated as follows:

(28) PRO must be ungoverned. (Chomsky and Lasnik (1993: 555))

The important generalization of the PRO theorem is that PRO only appears as a subject of control infinitivals. The issues here are why control con-

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23 Some languages such as Modern Greek and Icelandic show a difference in case between the controller and PRO. However, we believe that this is not problematic. In these cases, PRO receives the same structural case as the controller, but the inherent case of PRO appears overtly.

24 Martin (1996) offers an account for similar data from Icelandic within the null Case theory. Martin claims that PRO forms a chain with its controller, and some categories agreeing with PRO show a form of Case of the controller because null Case is morphologically impoverished. I thank an anonymous reviewer for bringing Martin’s analysis to my attention.
Instructions contain PRO as the subject in the embedded clauses and why a lexical DP is prohibited from appearing at that position.

Let us try to answer the first question. As the discussion in (25) shows, PRO enters into an Agree relation with a DP that occurs in the upper clause. As a result, PRO receives the necessary value, and the derivation converges. The subject position is the only position from which PRO can enter into an Agree relation across CP. If PRO were in object position within infinitivals, PRO could not be licensed, because as soon as vP is constructed, the domain of vP is Spelled-out and constitutes the inaccessible domain.

The next question is why a lexical DP cannot appear, instead of PRO. In this case, the derivation will crash, because T or V in the matrix receives the different φ-features from two DPs. Let us use (29) as an example.

(29) *John tried Bill to win the race.

Remember that the term "φ-features" is a cover term. It means person/number/gender specification and reference in the discourse. Infinitival T gets φ-features, which means that it receives the referential contents as well as person/number/gender specification from the controller, through the Agree relation. In (29), the referential contents of John and of Bill are different. In other words, the expressions of John and Bill refer to the different persons in the world. The infinitival T cannot receive different referential contents, and the derivation crashes.

To sum, from the subject position of control complements, an element enters into an Agree relation with an element in the upper clause. As a result, PRO can receive the necessary value. On the other hand, a lexical DP offers superfluous values to probe, which leads the derivation to crash. Therefore, the distributional property of PRO is accounted for by the transparency effect of the non-phase.25

Finally, we show that the present analysis is superior to the PRO theo-

25 As an anonymous reviewer correctly points out, the account presented in the text is not sufficient to account for the distribution of PRO. An additional assumption that PRO must be c-commanded by the controller is necessary. Thus, the account in the text fails to account for the ungrammaticality of the sentences in (i).

(i) *PRO tried John to leave.

There seems to be a requirement in the narrow syntax that elements that lack enough semantic contents (such as PRO and anaphors) should be c-commanded by the element with full contents such as the controller and the binder. Therefore, the question of why the requirement for c-command exists must be captured in a broader context, which is beyond the scope of the paper.
rem in a theoretical perspective. As Martin (1996) correctly points out, the PRO theorem does not follow logically from the Binding Conditions (A) and (B). Moreover, Chomsky and Lasnik (1993) point out that it is a descriptive generalization. What is worse, this generalization does not hold for many languages such as Balkan languages (see Terzi (1992), among others). It is just postulated only to describe the distribution of PRO mainly in English. On the other hand, in the present analysis, we can reduce the distribution of PRO to whether PRO can enter into an Agree relation cross-clausally. Thus, the present mechanism as an account of its distribution is better than the PRO theorem in that its distribution can be reduced to the operation Agree.26, 27

Before concluding this section, we discuss the complementary distribution between NP-trace and PRO. An anonymous reviewer points out that the current analysis faces a serious problem with the distribution of PRO, because it cannot account for the complementary distribution of NP-trace and PRO. This is shown in (30) and (31).

(30) a. It is illegal to park here.
    b. *John is illegal to park here.

(31) a. John attempted to park here.
    b. *John was attempted to park here
    c. Parking here was attempted by everyone.

26 An anonymous reviewer asks how the present analysis rules out sentences such as those in (i)–(iii), assuming that the multiple Agree relation among T, John, V, and PRO makes it possible for all unvalued φ-features to receive value from John.

(i) *John seems (to Mary) [cp to PRO be clever]
(ii) *John believes [cp to PRO be clever]
(iii) *John saw PRO.

The sentence in (i) is ruled out independently from the feature valuation. In (i), the matrix subject John cannot receive a θ-role from the verb seem. The failure of John to receive a θ-role leads to the ungrammaticality of this sentence. The more problematic sentences are (ii) and (iii). We argue that these are ungrammatical because the transitive matrix verb intervenes between John and PRO. In other words, PRO occurs within the domain inaccessible to John. Therefore, John cannot assign value to PRO.

The anonymous reviewer also points out that the account in terms of the inaccessible domain discussed just above causes a problem in the case of typical subject control verbs like try and attempt, because these verbs are, the reviewer assumes, transitive control verbs. However, we assume following Bowers (2002) that control verbs such as try and attempt are intransitive. The inaccessible domain is not created by these verbs.

27 It should be noted that Landau (2000) also proposes that multiple Agree holds between PRO and the controller. As a result, the controller is determined by way of an Agree relation. I thank an anonymous reviewer for bringing his analysis to my attention.
Under the null Case theory, the ungrammaticality of (30b) and (31b) is accounted for by the ban on movement from a case-marked position (Spec of infinitive to) to another case-marked position (Spec of the be-verb). As (30a) shows, the expletive it must be inserted.

Let us discuss the ungrammaticality of (31b) first. We claimed in note 26 that control verbs such as attempt are intransitive. Thus, the ungrammaticality of (31b) is readily accounted for by the assumption that intransitive verbs cannot undergo the passive operation. Next, the ungrammatical status of (30b) is attributed to the requirement that the subject of AP such as illegal should denote an event. The expression John is not an event, hence the sentence is ungrammatical. On the other hand, the expletive it is associated with the eventive expression to park here. Thus, only (30a) is grammatical.

The present analysis can account for the complementary distribution between PRO and NP-trace. Ungrammatical sentences such as (30b) and (31b) are probably ruled out for some other independent reasons.

5. ECM/Raising Constructions

Let us turn to raising constructions, shown in (32).

(32) a. Barnett seemed to understand the formula.
   b. Barnett believed the doctor to have examined Tilman.

(Davis and Dubinsky (2004: 3))

In the generative literature, the constructions shown in (32a) and (32b) are sometimes differently analyzed. However, we consider complement clauses in these constructions to be in the same syntactic status. They are CP complements.28

In section 3, we have argued that raising complements are introduced by CPs that are not phases, due to the absence of a Tense feature, as Table 1 shows. What we do in section 5.1 is to argue that raising complements have a CP projection and the presence/absence of the features claimed in section 3 is correct. In section 5.2, we show that operations can apply across the CP of raising complements since the CP that lacks a Tense feature is a non-phase and is not subject to the PIC. In section 5.3, we argue that the ECM (Exceptional-Case Marking) analysis cannot be supported in the Minimalist Program.

28 See Rooryck (1997) for a similar idea.
5.1. Properties of Complement Clauses in ECM/Raising Constructions

5.1.1. Presence of CP

Evidence that raising complements have a CP projection comes from languages where an overt complementizer occurs in clause initial position. For example, Belfast English has an overt complementizer for in both the raising to subject example in (33) and the raising to object example in (34).29

(33) John seems for to be better.
(34) I believe them for to have done it. (Henry (1995: 86))

Irish English offers another piece of evidence for a CP projection. As the example in (35) shows, the quantifier all can be stranded in the initial position of the complement clause of the raising construction.

(35) Who did you expect your mother [all to meet t at the party?]

(McCloskey (2000: 70))

Following McCloskey (2000), we assume that a quantifier can be stranded in an intermediate landing site for wh-movement. Given that wh-phrases move into [Spec, CP] successive-cyclically, raising complements should have a CP projection.

5.1.2. Absence of a Tense Feature

We show that the CP of raising complements does not have a Tense feature, using temporal morphology as diagnostic. In English, temporal morphology such as -ed or -en cannot appear on verbs in complement clauses in raising constructions. Moreover, as (36) shows, even in modern Greek, which has inflected infinitives, the complement clause cannot bear temporal morphology.

(36) *O e aftos tu arxizi na ton anisixise
The self his-Nom begins-3sg subj CL-Acc worry-3sg-Past
‘He started being worried about himself’

(Alexiadou and Anagnostopoulou (1999: 24))

In raising complements, there is a severe restriction on the temporal inflection of verbs. Therefore, we can conclude that there is no Tense feature in raising complements.

29 The following languages have an overt complementizer in raising to subject constructions: French, Japanese, Korean, Moroccan Arabic, Finnish, Persian, and Rumanian. In raising to object constructions, an overt complementizer can be found in Japanese, Korean, Quechua, Malagasy, some dialects of Swedish, and Bauan Fijian.
5.1.3. Presence of an Agree Feature

We claim that the CP of raising complements has an Agree feature. The example of the raising to subject sentence in (37) indicates that John uses [Spec, TP] in the complement clause as an intermediate landing site.

(37) John seems to Mary [t to appear to himself; t be happy.]

(Castillo, Drury, and Grohmann (1999: 29))

This is because [Spec, TP] in the complement clause is the only position where John is closer to the anaphor himself than Mary is. That John moves to [Spec, TP] means that T has an Agree feature that attracts the DP.

The conclusion of the presence of an Agree feature also can be drawn based on the raising to object example in (38), where the quantifier all is stranded in [Spec, TP] in the embedded clause.

(38) Mary believes the students [TP [all t] to [VP t know French]]

(Bošković (2001: 68))

Since the position of the floating quantifier indicates the position that the DP the students moves to, the subject moves to [Spec, TP] in the raising complement, on its way to the matrix. That indicates that the DP is attracted to [Spec, TP] by an Agree feature.

5.2. Operations across CP

In section 5.1, we have shown that raising complements do not have a Tense feature. It follows from our proposal that the CP of raising complements is a non-phase, and it is predicted that the CP is transparent for operations. In this section, we argue that the movement operation and agreement bear out these predictions.

5.2.1 Movement to the Matrix Clause

The first operation we consider to be applied across the CP is A-movement. In finite clauses, as shown in (39), the DP cannot move across CP, while in raising complements, as shown in (40), the movement operation can apply to the DP across CP.

(39) a. *John seems is likely to win. (Zwart (1994: 281))
    b. *Mary believes him (that) is an honest boy.

(40) a. John seems to be happy. (Chomsky (1986: 73))
    b. I believe John to be an honest boy. (Kaneko (1988: 271))

Since we have argued in section 5.1.1 that raising complements have a CP projection, movement in (40) must cross the CP projection. The CP of finite clauses is a phase, blocking A-movement, while the CP of raising
complements is a non-phase and, therefore, permits such movement.

5.2.2. Clitic Climbing

As we have discussed in section 4.2.5.1, a clitic usually cannot move across a clause boundary. However, as (41) and (42) show, it can move from the raising complements to the matrix clauses in Italian and French.

(41) Loi sembra capire ti (Italian)
    'He seems to understand it.' (Martins (2000: 171))
(42) On l’i estime ti être sage. (French)
    One him thinks to-be wise
    'People think that he is wise.' (Mensching (2001: 167))

In (41), the clitic that originates after capire ‘understand’ moves to the matrix clause. In (42), the embedded subject clitic moves into the matrix clause. The movement across the CP of raising complements is possible, because the TP in the embedded clause is not Spelled-Out, hence accessible to the matrix. This confirms our claim that the CP is a non-phase.

5.2.3. Agreement across CP

We predict that agreement also shows a contrast between finite and raising complements. In other words, we predict that the Agree operation can permeate the CP of raising complements. Consider the example (43) from Italian and (44) from Romanian.

(43) sembrano intervener-nei [ molti ti ]
    seem-3pl to intervene-of them many
    (Alexiadou and Anagnostopoulou (1998: 514))
(44) Nu-ii par profesoarei [CP [TP a fi sinceri
    not-Dat.CL.3sg seem.3pl teacher.Dat Inf be honest.pl
    copiiii aștia ]]
    kids-the.Nom these
    (Alboiu (2005: 32))

In (43), the matrix verb sembrano ‘seem’ bears inflection for 3rd person and plural. This inflection indicates that an Agree relation holds between the matrix verb and the embedded DP molti ‘many.’ In (44), an Agree relation holds between the matrix verb and the embedded nominative DP copiiii aștia ‘these kids.’ The existence of sentences such as those in (43) and (44) has been considered to be evidence for the expletive pro (Chomsky (1981) among others). Under the analysis that agreement takes place in the relation of government or spec-head, agreement can be “local” thanks to the presence of the expletive pro in the matrix clause.
However, under the Agree mechanism, "long-distance" agreement makes it possible for the matrix verb and the embedded DP to enter into the Agree relation. Therefore, there is no need to stipulate the expletive pro in [Spec, TP] in the constructions in (43) and (44). We assume that the matrix verb directly agrees with the DP in the embedded clause across CP. This is possible because the CP is a non-phase. Since the embedded TP does not undergo Spell-Out, the Agree relation holds across the CP.

5.3. Against the ECM Analysis

The present analysis has claimed that the "ECM" complements have the CP status and the accusative marked DP moves into the upper clause across CP. This analysis has an immediate consequence; the "ECM" analysis is not plausible.

In the GB era, in the following sentence, the complement clause had only the S projection and the embedded subject was case-marked exceptionally (Chomsky (1981) among others).  

(45) John [v believed [s Bill to be sad]]. (Chomsky (1981: 98))

This analysis has been called the "ECM" analysis. The support for the analysis comes mainly from two reasons. First, it comes from English and Romance languages, in which there is no overt complementizer introducing the complement clauses of raising verbs. Second, it is supported by the theory-internal reason that CP is a barrier that blocks A-movement (Chomsky (1986)). In other words, since CP is considered to be a barrier, the absence of CP is necessary for the matrix V to assign case to the embedded subject.

However, these two main reasons to support the "ECM" analysis do not hold in the Minimalist Program. The Minimalist Program adopts the Uniformity Principle as its guiding principle (Chomsky (2005)). Taking it into account that we can find many languages that have an overt complementizer in the embedded C, it is plausible to assume that in all languages, raising verbs take CP as their complements. Moreover, the Minimalist Program does not make use of such notions as government, barrier, and the related notions. Therefore, there is no reason to believe that the "ECM" analysis is appropriate for these constructions.

Rejecting the ECM analysis, the present analysis adopts the "Raising to

30 Chomsky (2005) holds the same idea; the complement clauses of raising to object constructions project until TP.
Object" analysis. What is important in the derivation is that an argument directly moves from the embedded [Spec, TP] to the canonical object position, [Spec, VP], in the matrix clause, without moving to [Spec, CP], while many proponents for the "Raising to Object" analysis consider [Spec, CP] to be an escape hatch for A-movement.31

6. Accusative with Infinitives in Turkish

In this section, we discuss (AcI) constructions in Turkish. An example is shown in (46) where the AcI clause is bracketed.

     you-Nom [I-Acc Ali-Acc see-Fut ] believe-Prog-2pl
     'you believe me to be going to see Ali.'

(Zidani-Eroğlu (1997: 221))

By AcI constructions, we refer to constructions that contain an AcI clause in the complement position of the verb.32 As Table 1 in section 3 shows, we have claimed that AcI clauses are introduced by the CP that has a Tense feature but lacks an Agree feature. In section 6.1, we argue that this is the case. By definition, the CP of AcI clauses is a non-phase. In section 6.2, we argue that an element within an AcI clause is accessible to another element in the upper domain across CP.

6.1. Properties of AcI Clauses

6.1.1. Tense and CP Projection

We show that AcIs have a Tense feature by using the same diagnostic test we have previously adopted: inflectional morphology. Verbs in AcIs can be marked for temporal inflection independently of the matrix verbs. This is shown in (46) above and in (47) below.

(47) (Siz) ben-i Ali-yi gör-dii san-iyor-sunuz.
     you-Nom I-Acc Ali-Acc see-Past believe-Prog-2pl

31 In addition, rejecting the ECM analysis, the present analysis can capture the intuition that the CSR (Canonical Structural Realization) of proposition is CP. I thank Masaru Nakamura (personal communication) for pointing this out to me.

In fact, Ormazabal (1995) claims that propositions, either finite or non-finite, must be the CPs. I thank an anonymous reviewer for pointing out his claim.

32 Some researchers analyze AcI constructions as ECM/Raising to Object constructions. However, we claim that these two constructions differ in temporal properties, and hence are different constructions.
‘You believe me to have seen Ali’ (Zidani-Eroğlu (1997: 221))

In Turkish, a full range of tense contrasts is permitted on verbs in AcIs. Thus, we conclude that AcIs have a Tense feature.

We do not find morphological evidence for a CP projection. However, under the assumption that a Tense feature is introduced with CP, we can conclude that AcI clauses have the CP projection from which the Tense feature is transmitted to TP. Since a Tense feature enters into the syntax with CP, AcIs should have the CP projection.

6.1.2. Absence of an Agree Feature

We argue that AcIs have no Agree feature. Before discussing AcIs, we first take a look at the subject position in finite clauses and consider how an Agree feature in the clauses is checked. Let us observe the fact that case morphology appears on objects but not on subjects. See the sentences in (48) as examples.

Ali yesterday/with a spoon/quickly cake(-Acc) ate
‘Ali ate (some) cake yesterday/quickly/with a spoon.’

Ali this cake-Acc yesterday/with a spoon/quickly ate
‘Ali ate this cake quickly/yesterday/with a spoon/quickly.’

(Cagri (2004: 41))

Suppose that Turkish has the following phrase structure:

(49) [TP T [vP V [AgrP Agr [vP V]]]]

When the object stays in-situ, as in (48a), no case maker appears on the DP. As (48b) shows, when the object moves into a higher position, the DP is marked as accusative. On the other hand, in this language, a subject does not bear any case morphology. We interpret this fact as follows: an element that stays in-situ does not bear any case morphology. The object is marked for accusative only when it raises from VP to [Spec, AgrP]. On the other hand, the subject always stays in [Spec, vP], and case morphology does not appear on it.

In finite clauses, subjects stay in [Spec, vP]. It is then concluded that in Turkish, T has no ability to attract a DP in its Spec position. The question that arises is how an Agree feature is checked in finite clauses. We assume that it is deleted by a head movement of V, following Alexiadou and Anagnostopoulou (1998), who claim that verbal agreement morphology on V can check an Agree feature on T by way of head movement of V. Thus, although subjects stay in-situ, V moves to T to check an Agree feature in
finite clauses in Turkish.

Let us turn to the AcIs in Turkish. Remember that we assumed that T is unable to attract a DP. We assume that it is so in AcIs. Then, the question is whether the head movement of V occurs in AcIs to check an Agree feature. Our answer is no. Alexiadou and Anagnostopoulou’s claim is that Agree feature on T is checked off by verbal agreement on V. However, in AcIs, the verb does not have any inflectional morphology. Therefore the conclusion we reach is that in AcIs, the subject stays in [Spec, vP] and the head movement does not occur. This means that in AcIs, C does not have an Agree feature that causes movement of the subject DP and the head movement of V. In other words, T does not have an Agree feature, which is inherited from C.

6.2. Operations across CP

In section 6.1, we have demonstrated that AcI clauses do not have an Agree feature (although they have a Tense feature). It follows that the CP of AcI clauses is a non-phase. As a consequence, operations are applicable across the CP. In section 6.2, we show that this prediction is borne out.

6.2.1. Movement to the Matrix Clause

Let us now consider the movement operation. See the sentences in (50) where the embedded clause is finite and (51) where the embedded clause is the AcI.

(50) *Ali Can sik sik dövüldü de-di.
    Ali-Nom Can-Nom often beat-Pass-Past say-Past-3sg  
    ‘Ali said that Can was beaten frequently.’

(51) Ali Cani sik sik dövüldü san-ir.
    Ali-Nom Can-Acc often beat-Pass-Past believe-Aor-3sg 
    ‘Ali believe Can to have been beaten frequently.’

(Zidani-Eroğlu (1997: 222–223))

We are here concerned with the reading that the adverb sik sik ‘often’ in both (50) and (51) modifies the matrix verb. In (50), the embedded subject cannot precede the matrix adverb. This fact shows that the embedded subject cannot move out of the finite clause across CP. On the other hand, in (51), the DP Cani ‘Can’ undergoes A-movement to the matrix across CP.

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33 The sentence in (50) is grammatical if the adverb sik sik ‘often’ modifies the embedded verb, a reading that conveys the frequency of beating.
and it can precede the matrix adverb.

This contrast between finite clauses and AcIs is accounted for in terms of the difference in the status of CP between them. The CP of AcIs is a non-phase, and operations can apply across the CP. Thus, in (51), the embedded subject place in [Spec, vP] directly moves into the matrix object position across CP. In (50), Spell-Out applies to the TP complement of the finite CP, and the embedded subject is not accessible to the matrix.

6.2.2. Rightward Movement

George and Kornfilt (1981) note that operations such as rightward movement show a contrast between the finite complement in (52) and the AcI complement in (53).34

(52) *dinleyici-ler [ti viski-yi iç-ti-k] san-iyor-lar
    auditor-pl ti whisky-Acc drink-Past-1pl believed-Pres-3pl
    biz-i
    we-Nom
    ‘The auditors believed that we drank the whisky.’

(53) dinleyici-ler [ti viski-yi iç-ti] san-iyor-lar
    auditor-pl ti whisky-Acc drink-Past-(no Agr) believe-Pres-3pl
    biz-i
    we-Acc
    ‘The auditors believed us to have drunk the whiskey.’

We can predict the contrast in terms of the phase status of CPs. In (53), the embedded subject biz-i ‘we’ undergoes rightward movement; it is right-adjoined to the triggering XP. Suppose that this movement is triggered by the matrix vP and then by the matrix CP. Since the embedded subject DP in the AcI clause moves to [Spec, VP] in the matrix across CP and this position is accessible to the matrix v, the DP can undergo rightward movement motivated by the matrix v and further by the matrix CP. The derivation converges. On the other hand, in the finite clause in (52), the embedded subject stays in the embedded clause, since it cannot move across the finite CP. When v in the matrix is introduced, the embedded TP has already been Spelled-Out along with the embedded subject. The embedded subject

34 This rightward movement can be analyzed as rightward scrambling found in Turkish. I thank an anonymous reviewer for bringing the rightward scrambling to my attention.
cannot undergo the rightward movement operation triggered by the v in the matrix.

6.3. On A-Movement

We have claimed (stated in section 6.1.2) that the CP of AcI clauses does not have an Agree feature. This means that A-movement skips an intermediate landing site. Thus, it is not always the case that any Ts attract a DP in its specifier position.

It is widely held that T, either finite or non-finite, shows "an EPP property" that attracts a DP and offers a landing site for A-movement. However, in AcI constructions, A-movement does not occur successive-cyclically; it skips [Spec, TP] in the embedded clause, due to the absence of an Agree feature on C. The movement of the argument takes place from the embedded [Spec, vP] directly to the matrix object position. Thus, successive cyclicity of A-movement is not a universal property of T. T attracts a DP only when the inheritance of an Agree feature from C to T occurs.35

7. Conclusion

In this paper, we have argued that the combination of features determines the phasehood of CPs. Given an Agree feature and a Tense feature on CP, there should be four types of CPs. We have proposed that the presence of the two features makes CP a phase, while the absence of one or two of the features makes CP a non-phase. We assume, following Chomsky (2005), that a finite CP possesses both features, and it follows that the finite CP is a phase. On the other hand, the examination of the CPs introducing control complements, raising complements, and AcIs leads us to conclude that these types of CPs lack one or two of the features. Our proposal predicts that operations are impossible across the finite CP, but possible across the CP of the control complements, raising complements, and AcIs. We have shown that this prediction is borne out.

35 An anonymous reviewer asks whether there is any empirical evidence for the claim that the accusative marked phrase skips the embedded [Spec, TP]. The argument here is theory-internal. In addition, it should be noted that it is hard to construct sentences with the embedded [Spec, TP] filled with an overt element. This is because the accusative phrase must move to the upper clause to check the Agree feature on V.
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